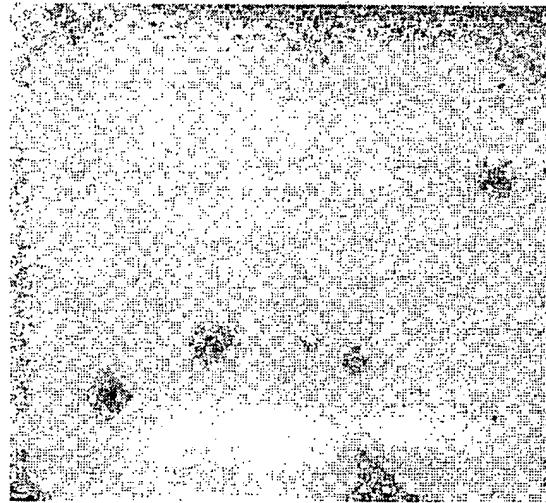




REPLACEMENT SHEET  
Atty Docket: 427008007US Inventors: Victor Higgs et al.  
Title: MICRO DEFECTS IN SEMI-CONDUCTORS

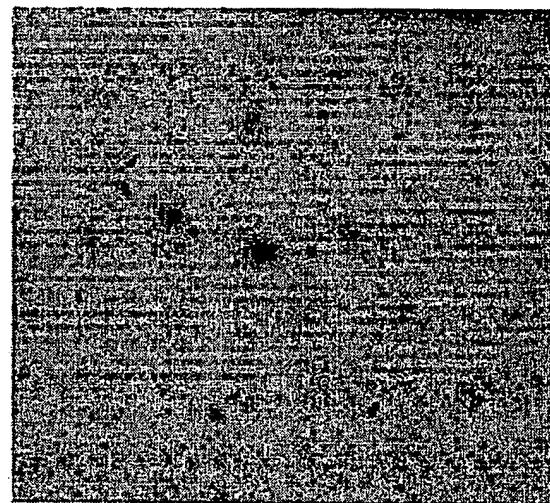
1/5

PL IMAGE OF AS-GROWN DEFECTS IN CZ Si  
SCAN AREA 1mm x 1mm



*Fig. 1*

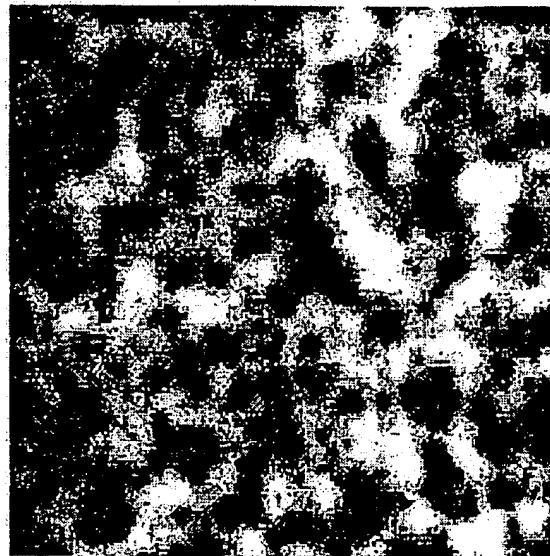
PL IMAGE OF AS-GROWN DEFECTS IN CZ Si AFTER Fe CONTAMINATION  $1 \times 10^{11}$  atoms.cm $^{-3}$   
SCAN AREA 1mm x 1mm



*Fig. 2*

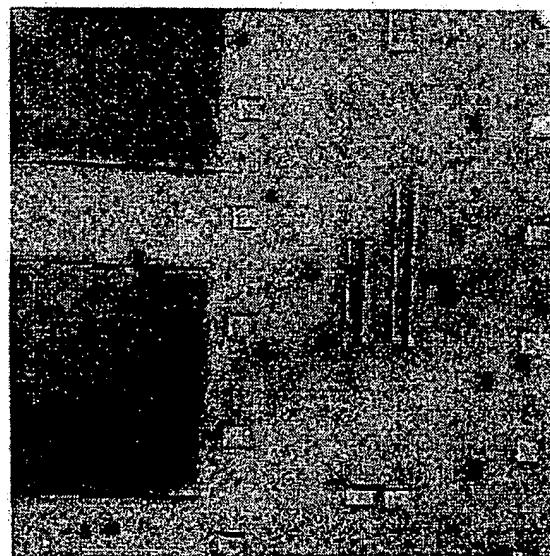
2/5

PL IMAGE OF OXYGEN PRECIPITATES IN ANNEALED Si  
SCAN AREA 1mm x 1mm



*Fig. 3*

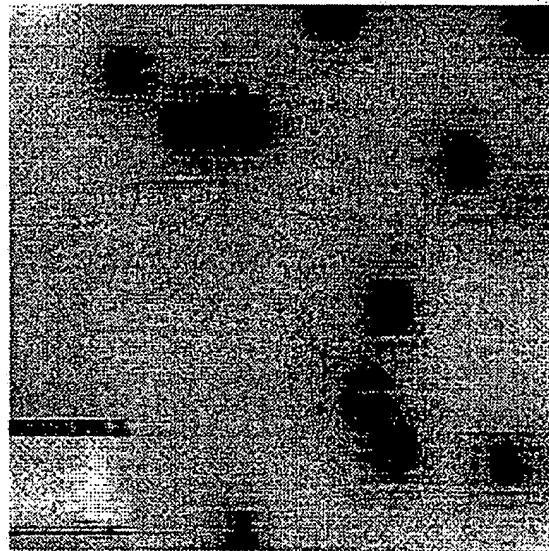
PL IMAGE OF Ni SILICIDE PRECIPITATES IN CMOS PROCESSED TEST WAFER  
SCAN AREA 500 x 500  $\mu$ m



*Fig. 4*

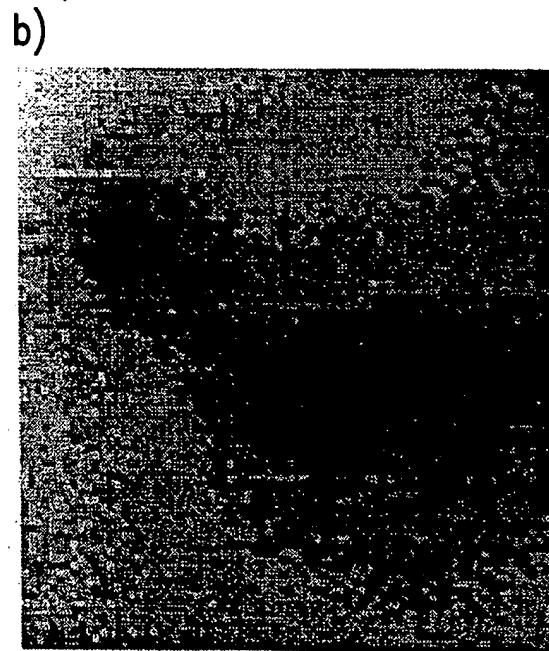
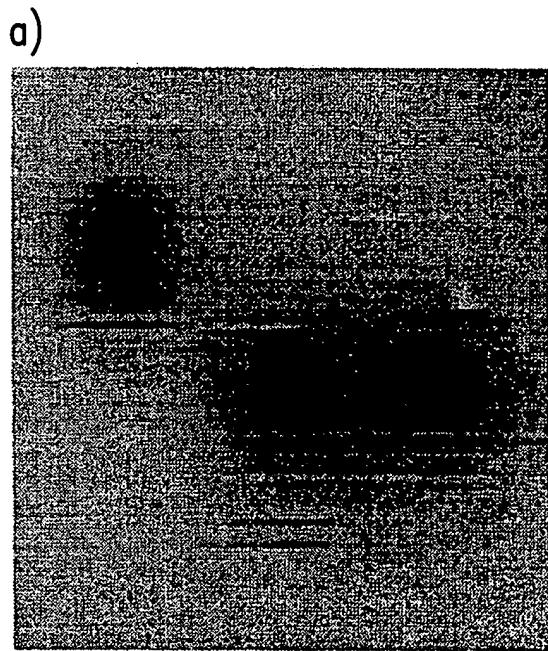
3/5

PL IMAGE OF Cu SILICIDE PRECIPITATES IN CMOS PROCESSED TEST WAFER  
SCAN AREA 100mm x 100 $\mu$ m



*Fig. 5*

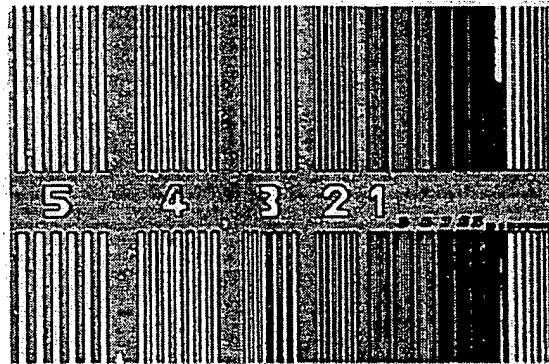
PL IMAGE OF Cu SILICIDE PRECIPITATES IN CMOS PROCESSED TEST WAFER,  
a) HIGH INJECTION, b) LOW INJECTION.  
SCAN AREA 37 x 39  $\mu$ m



*Fig. 6*

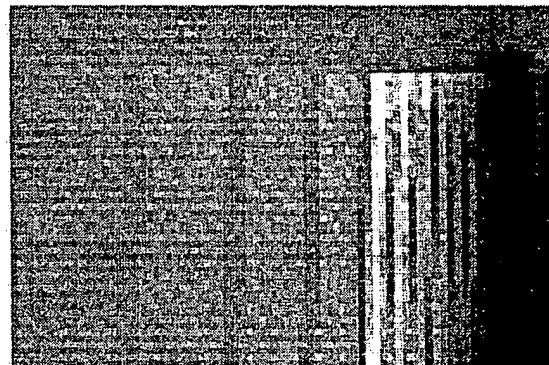
4/5

MICROGRAPH OF LOCOS TEST STRUCTURE  
SCAN AREA 120 x 60  $\mu\text{m}$



*Fig. 7*

PL IMAGE OF LOCOS TEST STRUCTURE REVEALING A HIGH DENSITY OF DISLOCATIONS  
SCAN AREA 120 x 60  $\mu\text{m}$



*Fig. 8*

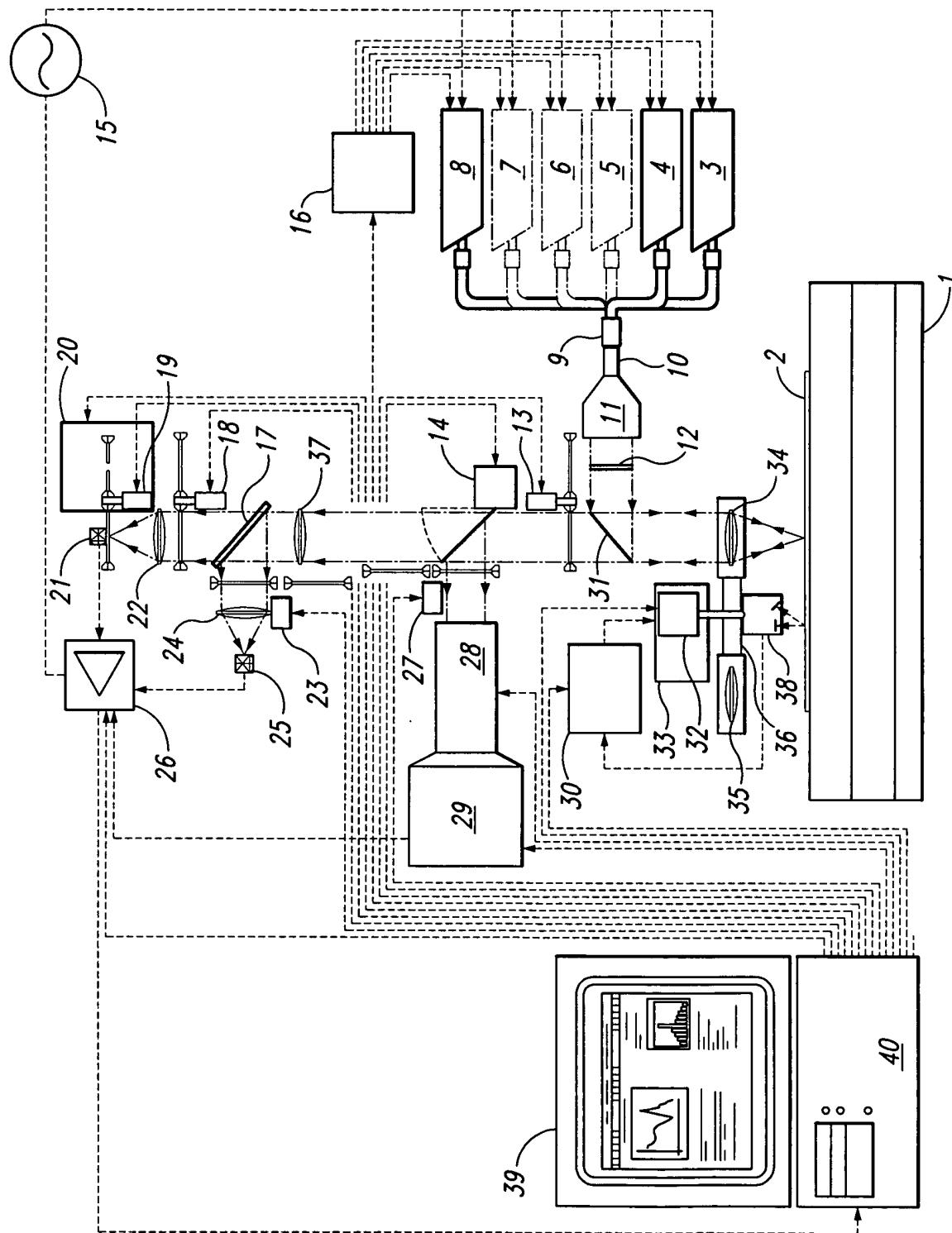


Fig. 9